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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,568	06/26/2001	Masatoshi Tanaka	0229-0651P	9463

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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/888,568

Applicant(s)

TANAKA, MASATOSHI

Examiner

Geoffrey L. Knable

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2003.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4 and 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. Newly submitted claims 11-13 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The originally presented/claimed invention was directed to embodiments/species in which "one of" the density and tension were gradually increased. New claims 11-13 are however directed to a new, previously not presented/claimed embodiment<sup>1</sup> of increasing *both* the density and the tension, this being a patentably distinct species from that originally presented/claimed (their being no generic claim).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-13 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. Claims 4 and 7-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

New claim 7 defines that the average tension is increased "to satisfy the following relationships," this followed by the two relationships. This new requirement that the tension be increased to satisfy the two relationships was however not described in the

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<sup>1</sup> It is additionally noted that it is not seen where this newly claimed embodiment is described in the original disclosure.

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original disclosure and thus it is submitted that such was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter. While each requirement/relationship was originally described as separately applicable, it was never described that both relationships be satisfied. In fact, these two relationships were originally described as relating to two different embodiments and are in fact inconsistent with one another (note that when position "n" equals "e", it is impossible to satisfy both relationships since  $T_e$  would need to be both greater than and equal to  $R_c/R_e$ ). This will be addressed in the 35 USC 112 second paragraph rejection below.

New dependent claim 8 obviously suffers from the same lack of description/new matter as claim 7.

New claim 9 suffers from an analogous lack of description/new matter as claim 7. In particular, claim 9 defines that the average density is increased "to satisfy the following relationships," this followed by the two relationships. This new requirement that the density be increased to satisfy the two relationships was however not described in the original disclosure and thus it is submitted that such was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter. While each requirement/relationship was originally described as separately applicable, it was never described that both relationships be satisfied. In fact, these two relationships were originally described as

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relating to two different embodiments and are in fact inconsistent with one another (note that when position "n" equals "e", it is impossible to satisfy both relationships since De would need to be both greater than and equal to Rc/Re). This will be addressed in the 35 USC 112 second paragraph rejection below.

New dependent claim 10 obviously suffers from the same lack of description/new matter as claim 9.

3. Claims 4 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In new claims 7 and 9, lines 1+, reference is still made to a method of making a tire, the tire comprising a tread, sidewall, beads, carcass, etc. whereas the actual positive steps of the method only describe applying a belt and band, this again still raising an ambiguity in determining the scope of the claim. In other words, it is not clear if the claim requires steps to make a tire (with tread, sidewalls, etc.) consistent with the preamble or only requires the recited steps. In other words, the inconsistency between the preamble and body of the claim presents this ambiguity rendering the scope of the claim indefinite. It was suggested in the last office action that the claim be recast in Jepson form to avoid this ambiguity – e.g. by changing "A method..." in line 1 of each claim to –In a method— and changing "said method comprising" to –the improvement comprising--. Although the claims do now recite "the improvement comprising", this follows the earlier recitation of "said method comprising" and thus the ambiguity in scope of the claims remains.

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As noted above, the new requirements in claims 7 and 9 that the tension/density meet both relationships is not only not described/new matter, but it also presents conflicting requirements making the scope of the claims entirely indefinite and confusing. Note again that a tire that meets the first relationship *cannot* also meet the second. Again, these were described as alternative and explicit different embodiments in the original disclosure and the mixing of them in the new claims renders the scope entirely indefinite and confusing. It is also difficult (actually impossible) to accurately apply the prior art against the new claims in light of these ambiguities – for purposes of this office action, the art will be applied for the same reasons as set forth in the last office action against the corresponding claims 2/3 and 5/6.

In claim 7, line 11, no antecedent has been established for “the cylindrical drum”.

In claim 10, line 2, reference is made to densities  $D_{c'}$  and  $D_{e'}$  - these densities (i.e. with the “primes”) are however not used anywhere else in the claim, creating an ambiguity.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bormann et al. (US 4,869,307) or Watanabe et al. (US 5,076,336) and further in view of Kojima et al. (US 5,032,198) and optionally Ushikubo et al. (US 4,824,501) as applied against claims 1-4 in the last office action.

6. Claims 4 and 7-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kojima et al. (US 5,032,198) as applied against claims 1-6 in the last office action.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushikubo et al. (US 4,824,501) as applied in the last office action against claim 5.

5. Applicant's arguments filed June 9, 2003 have been fully considered but they are not persuasive.

With respect to the prior rejection of claims 2-4, it is argued that Kojima '198 and Ushikubo '501 use a convex rather than cylindrical drum and therefore would teach away from using a cylindrical drum. It should however first be noted that these references are *not* limited to winding on a convex drum. As set forth in the last office action, Ushikubo et al. discloses building a tire in which the belt/breaker and band are formed on a cylindrical drum, the band being formed by spirally winding band cords so as to have gradually increasing tension in the axial direction from the center outwards – note esp. col. 2, lines 30-37 and col. 4, lines 37-68. Similarly, Kojima et al. discloses building a tire in which the belt/breaker and band are formed on a drum, the band being formed by spirally winding band cords so as to have gradually increasing tension in the axial direction from the center outwards – note esp. col. 9, line 39 – col. 10, line 7. Further, although the preferred form of this invention in Kojima et al. (like the alternate embodiment in Ushikubo) uses a contoured drum, the reference clearly indicates that a linear or cylindrical drum shape (e.g. fig. 22) can be used, this being the embodiment where the tension variation is employed (note esp. col. 17, lines 30-45 as well as col.

19, lines 17-20 indicating that the contoured drum (like in Ushikubo) can use constant tension). Thus, these references would not have suggested or taught that only a convex drum could be used. Further, and importantly, these *secondary* references were used principally as evidence of an understanding of the problem being addressed with respect to reduced band reinforcing effect at the shoulders due to convex tire shaping and how this knowledge would have rendered selection of cord densities based upon or corresponding to the convex shape of the finished tire obvious – note the statement of rejection in the last office action for a complete recitation of the reasoning in this regard.

With respect to the rejection over Kojima et al. alone, it is again argued that this reference teaches away from a cylindrical drum. However, as noted above, Kojima is not limited to a convex drum and in fact for at least the embodiment with tension variation, the reference further clearly indicates that a linear or cylindrical drum shape (e.g. fig. 22) can be used (note esp. col. 17, lines 30-45 as well as col. 19, lines 17-20 indicating that the contoured drum (like in Ushikubo) can use constant tension). With respect to the changing density embodiment, note again the detailed statement of rejection in the last office action.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

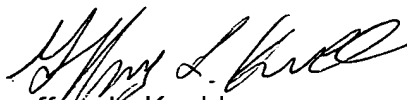


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 703-308-2062. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

  
Geoffrey L. Knable  
Primary Examiner  
Art Unit 1733

G. Knable  
August 14, 2003